Considering the Effect of Place on Cancer Disparities

Summit on the
Burden of Cancer in Tennessee

June 15, 2006

East Tennessee State University

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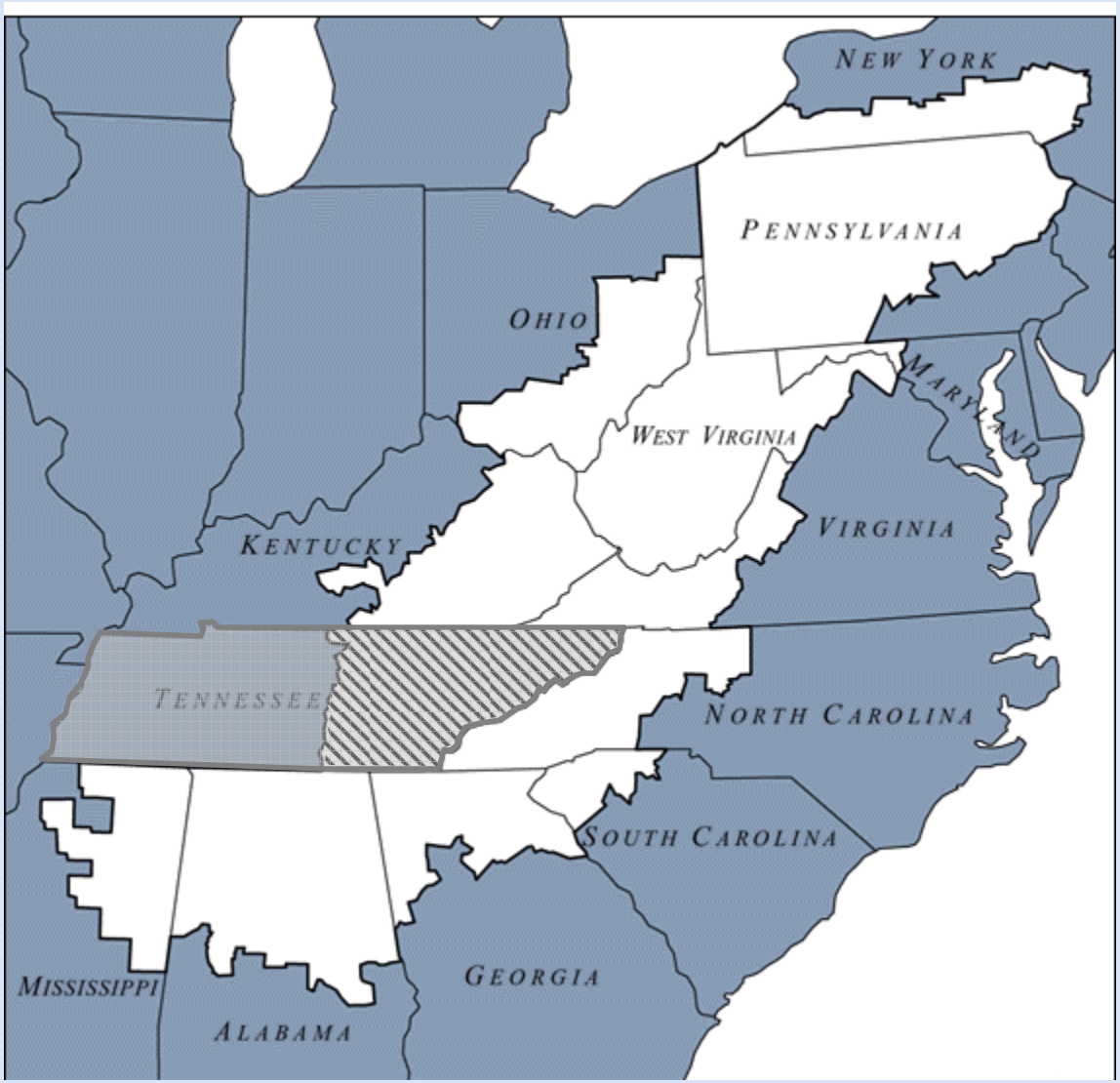


East TN region is located in two regions with poor health statistics

Appalachian Region

State of Tennessee

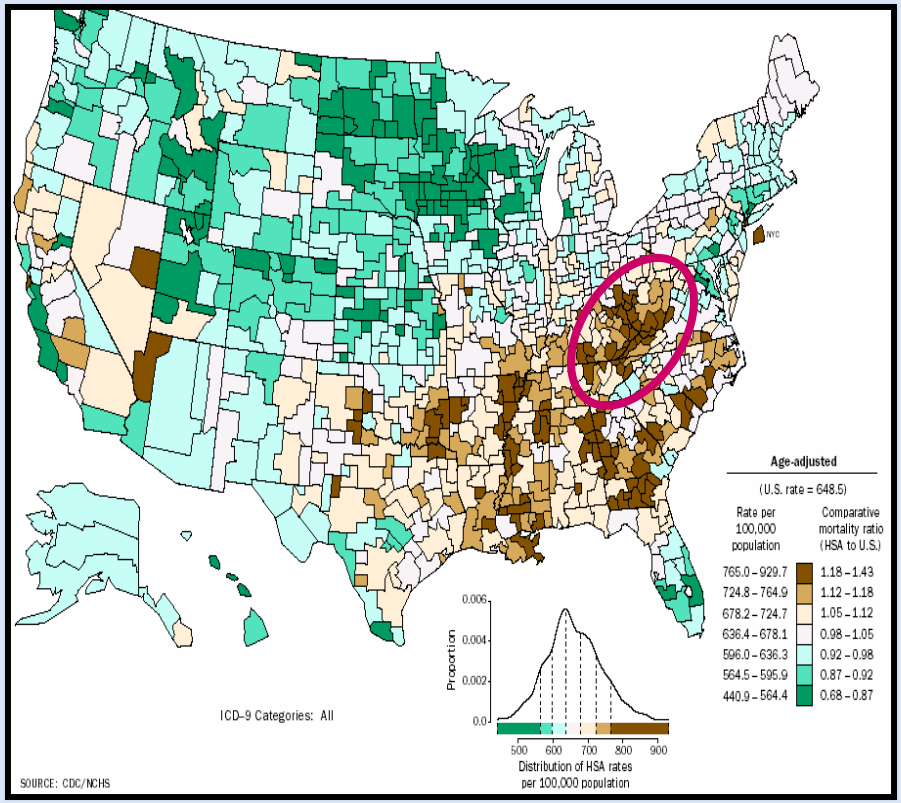
Appalachian TN

Tennessee Rankings

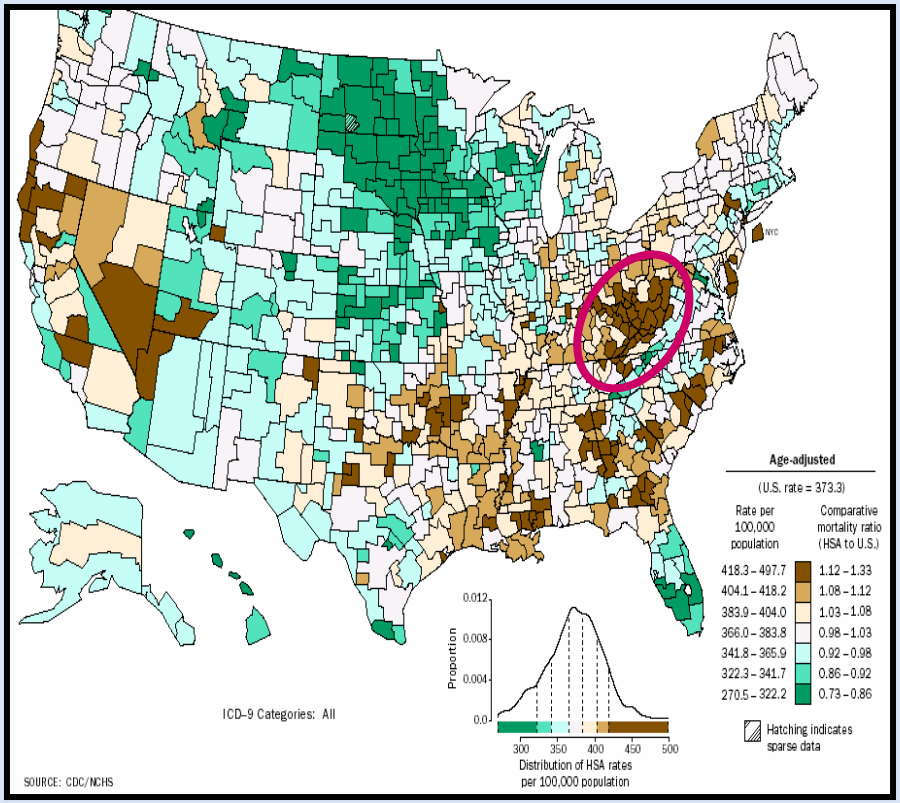
- At high risk…
  - # 2 = percent of adults who report no physical activity
  - # 4 = cigarette smoking
  - # 7 = obesity among adults
- High death rates
  - # 3 = stroke death rate
  - # 7 = cancer death rate
  - # 8 = diabetes death rate
  - # 10 = heart disease death rate

From: KaiserStateHealthFacts.org (data for 2001 unless otherwise noted)

First maps that identified a regional problem in national focus



White males, age adjusted mortality, 1988-1992



White females age-adjusted mortality, 1988-92

From: National Center for Health Statistics

Recent findings about health status in Appalachian region compared to US

- All Cancers and Lung Cancer death rates higher in Appalachia and rural Appalachia than US *
- Cervical Cancer death rate higher for Rural Appalachia *,**
- Colorectal cancer death rate higher for Appalachia *

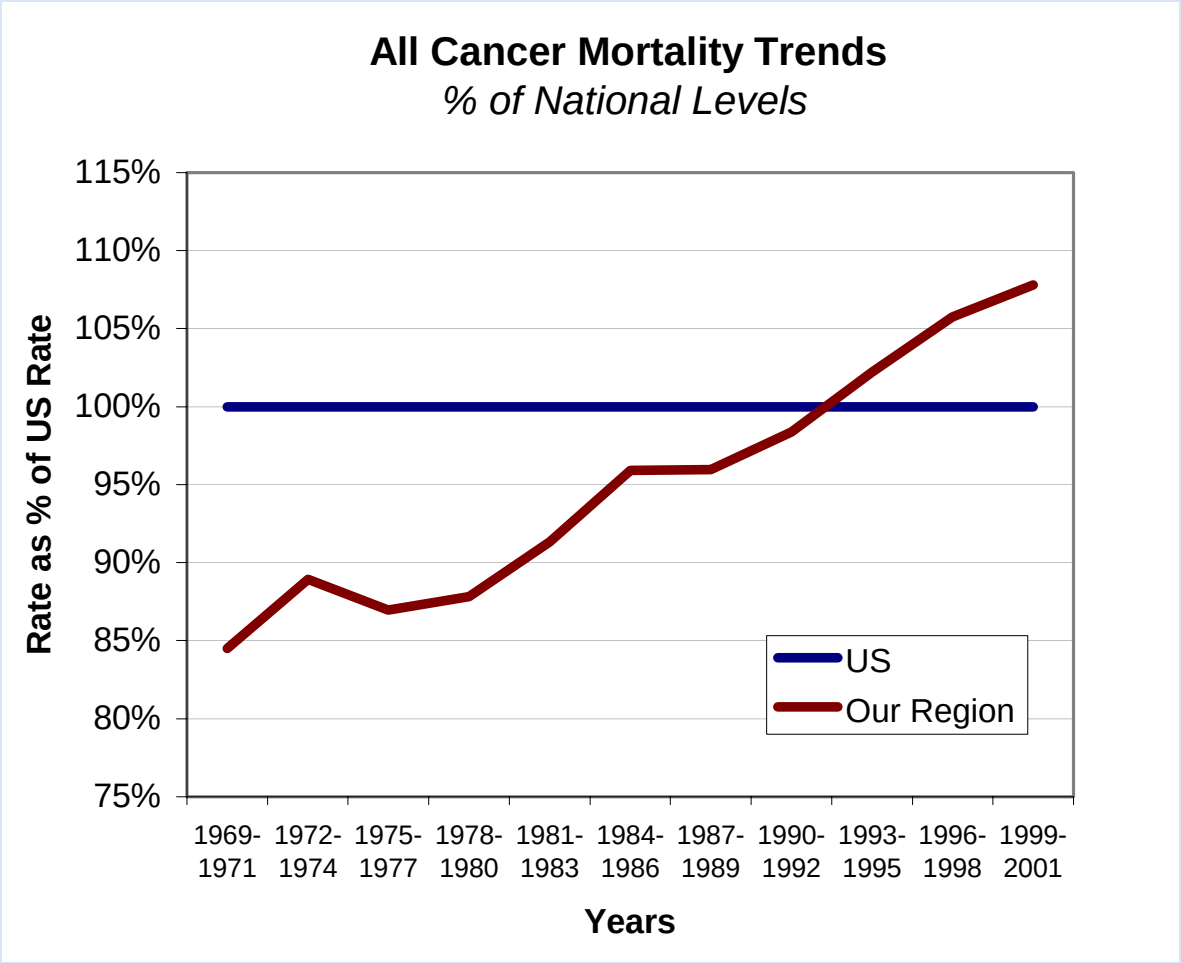
* Huang, MMRW, 2002.
** Yabroff, et.al, NCI, 2001.

More recent findings about Appalachian region

- For most causes of death Appalachian White rates higher than US White rates ***
- For many causes of death Appalachian African American rates higher than US African American rates ***
- Premature mortality rates higher in Appalachia than US ***

* *** Halverson, ARC, 2004.

How Tri Cities region compares with national cancer death rate



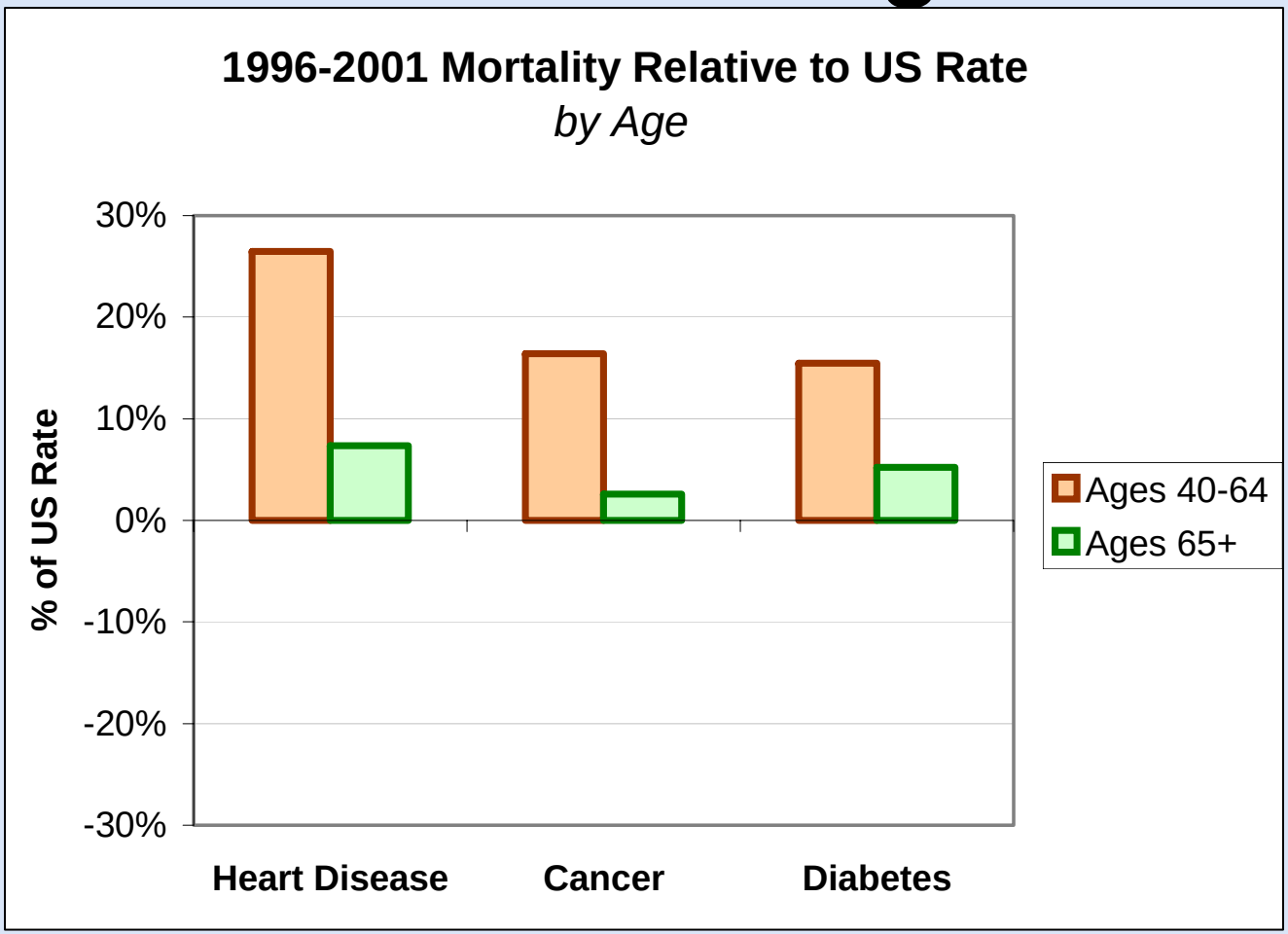
Appalachian mortality exceeds many national mortality rates (1990-97)

Cause of Death	Premature Mortality 35-64				Elderly Mortality age 65+			
	White Male	White Female	Black Male	Black Female	White Male	White Female	Black Male	Black Female
Heart disease								
Cancers								
Stroke								
Lung Cancer								
Accidental deaths								
COPD								
Diabetes								
Motor Vehicle Accidents								

Rates exceed national rates

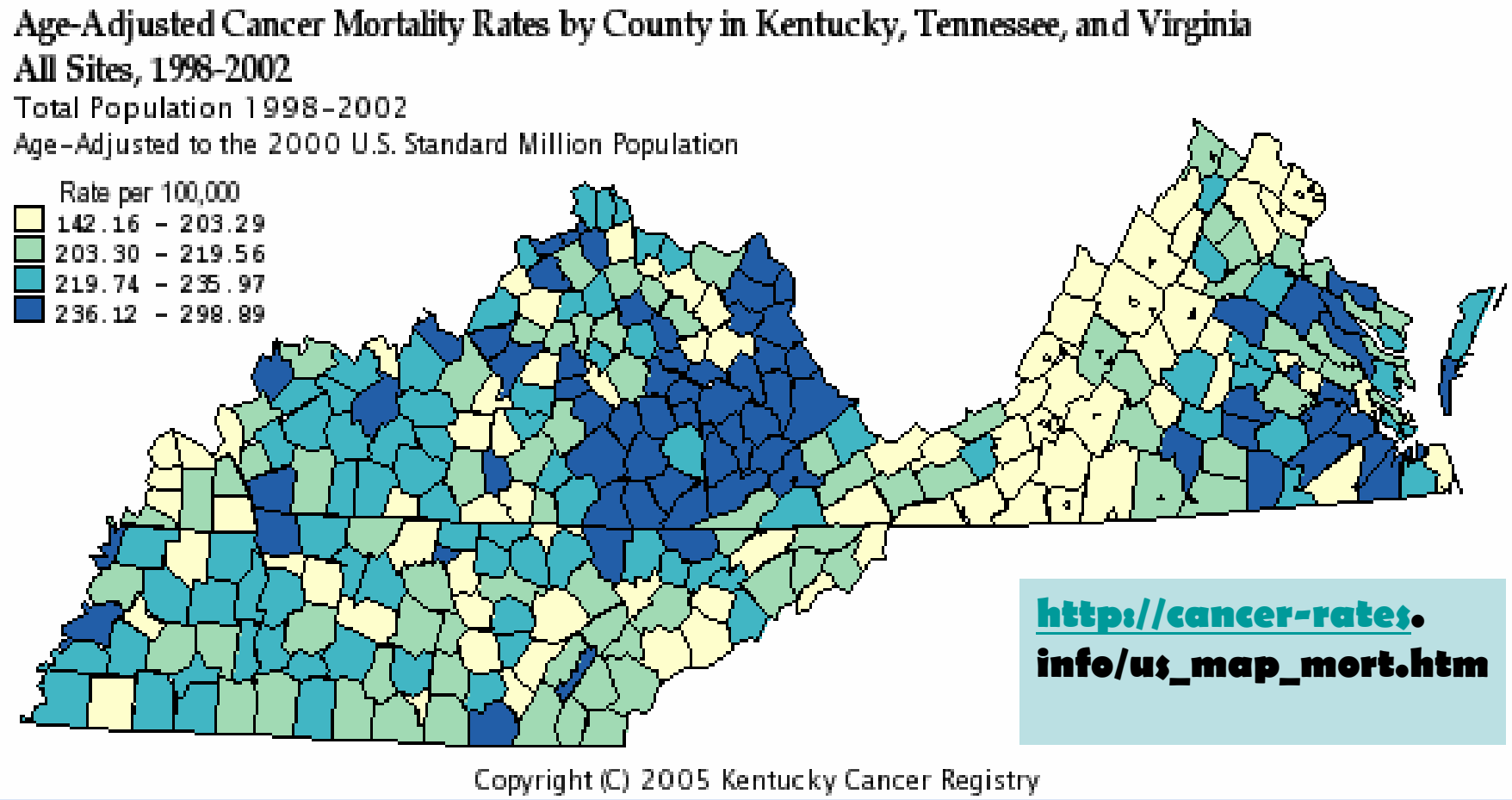
Rates do not exceed

African America Mortality in Northeast TN Region

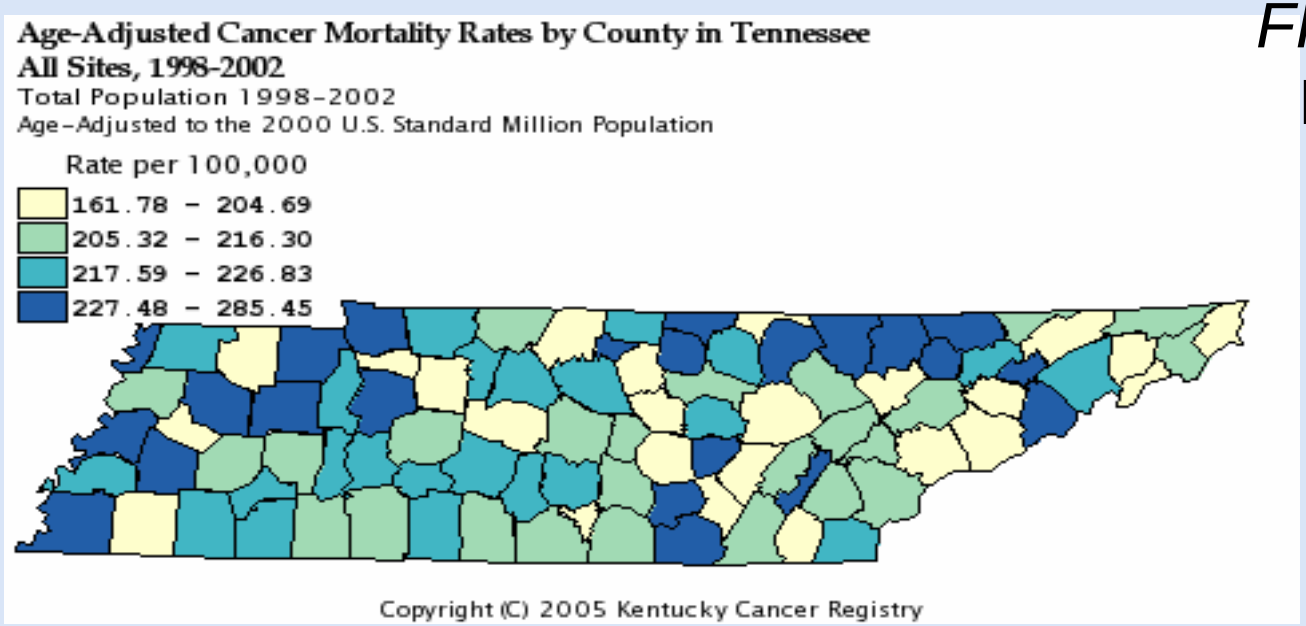


Geary: Health Status of African Americans in the Tennessee First Congressional District, 2005

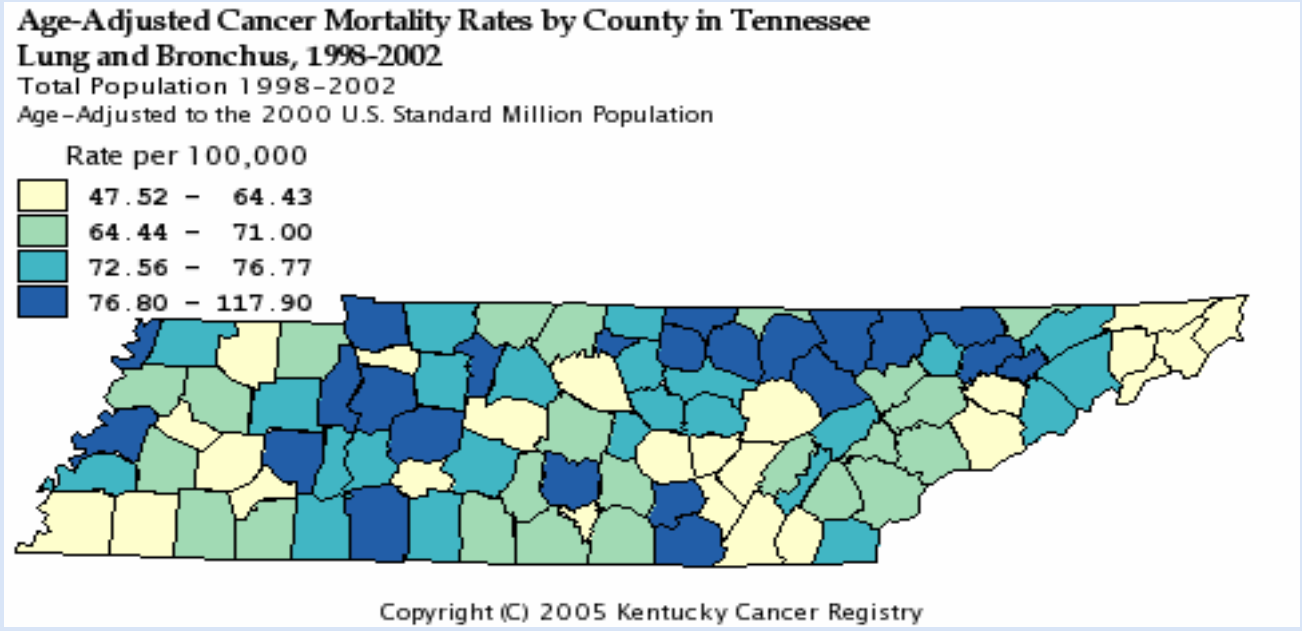
FINDING: Some cancer mortality patterns cross state boundaries…



ALL CANCER MORTALITY

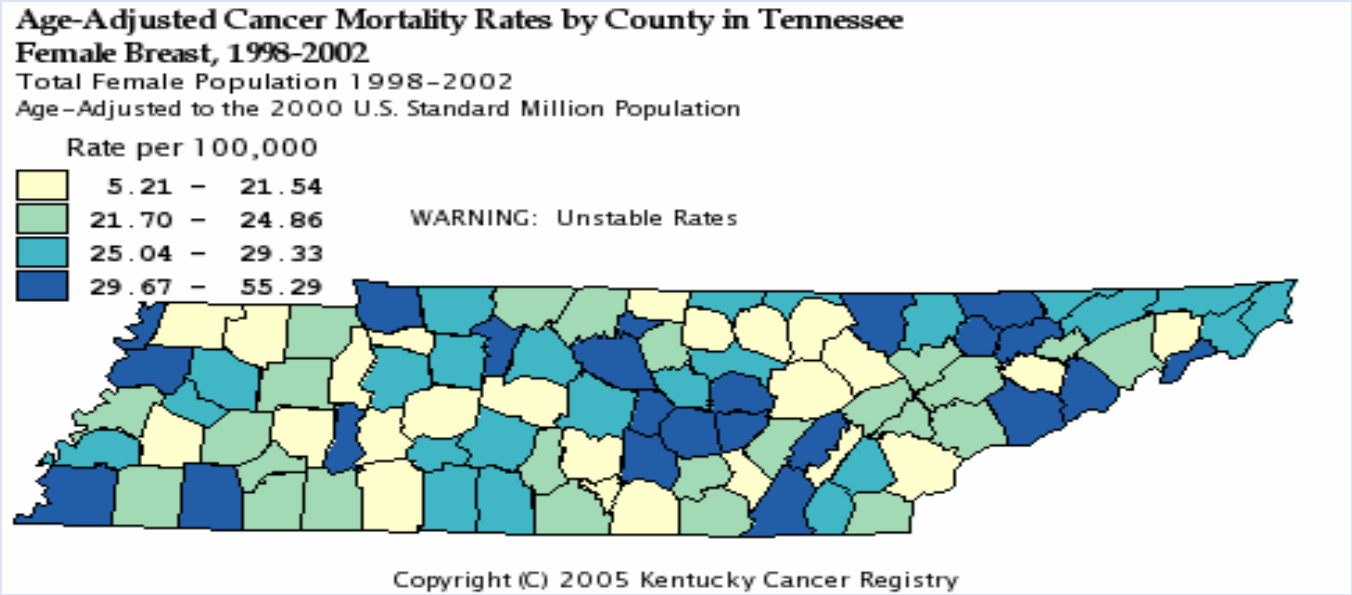


LUNG CANCER MORTALITY

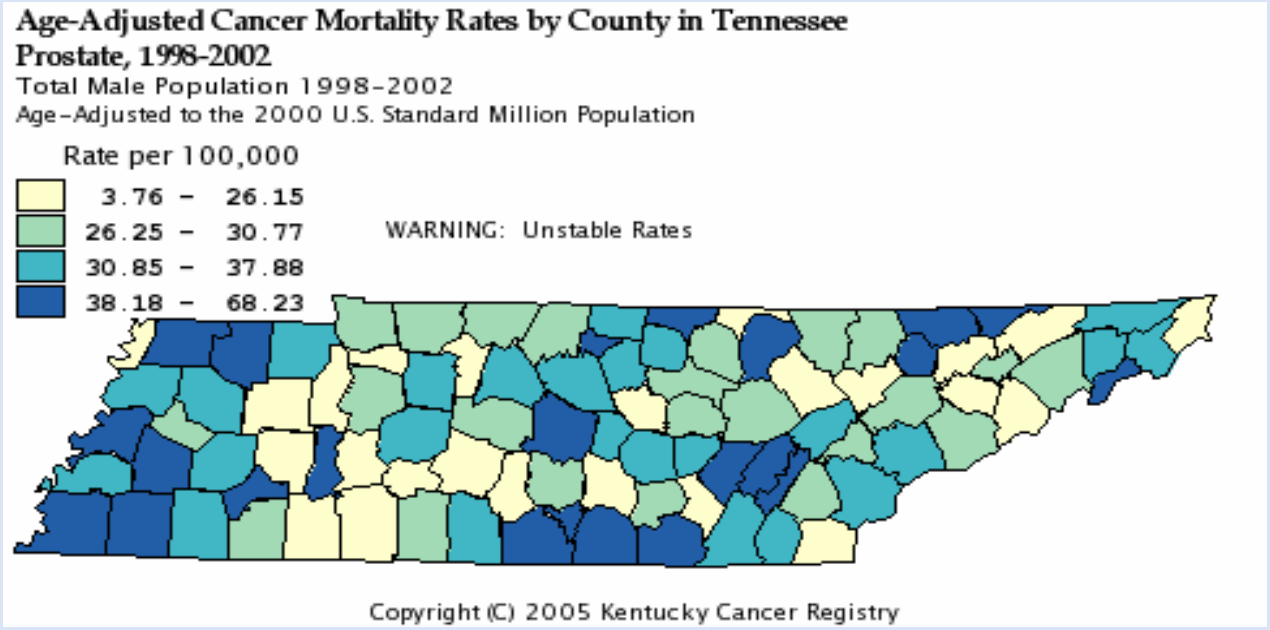


FINDING: Patterns are different for different types of cancer.

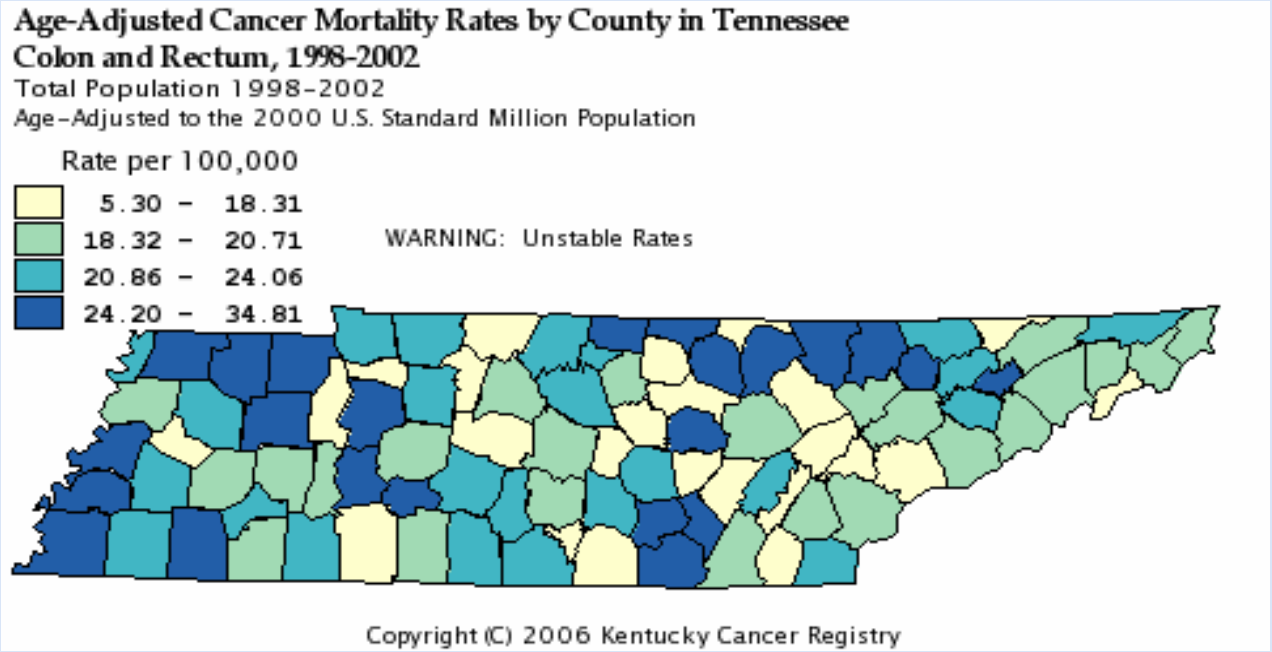
BREAST CANCER MORTALITY



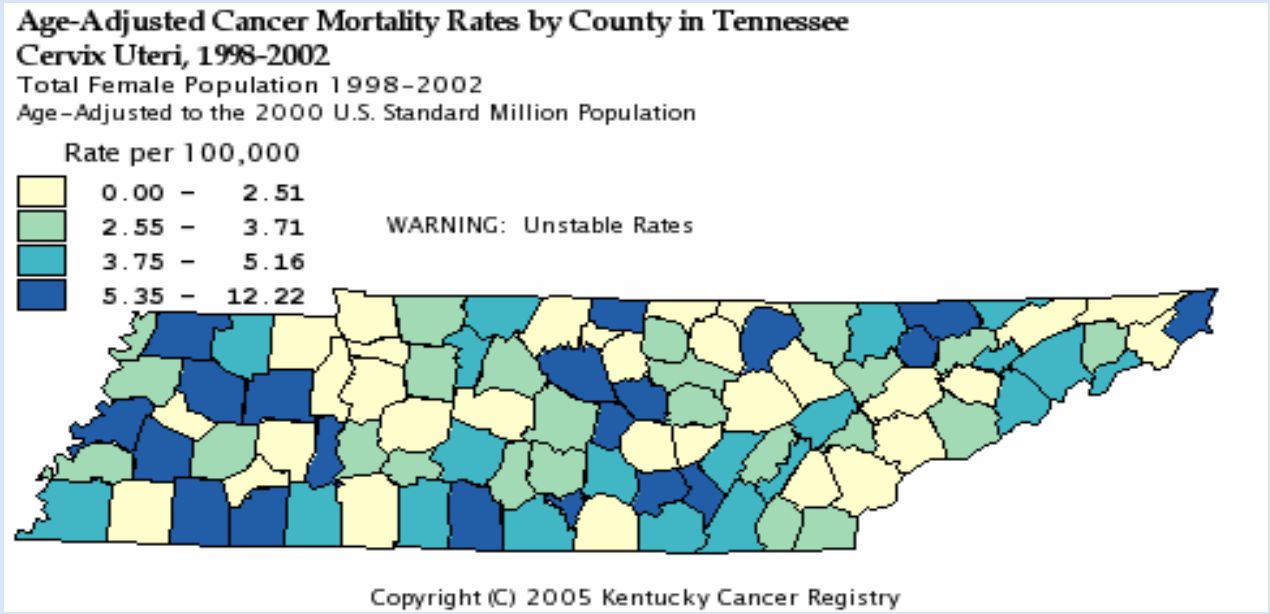
PROSTATE CANCER MORTALITY



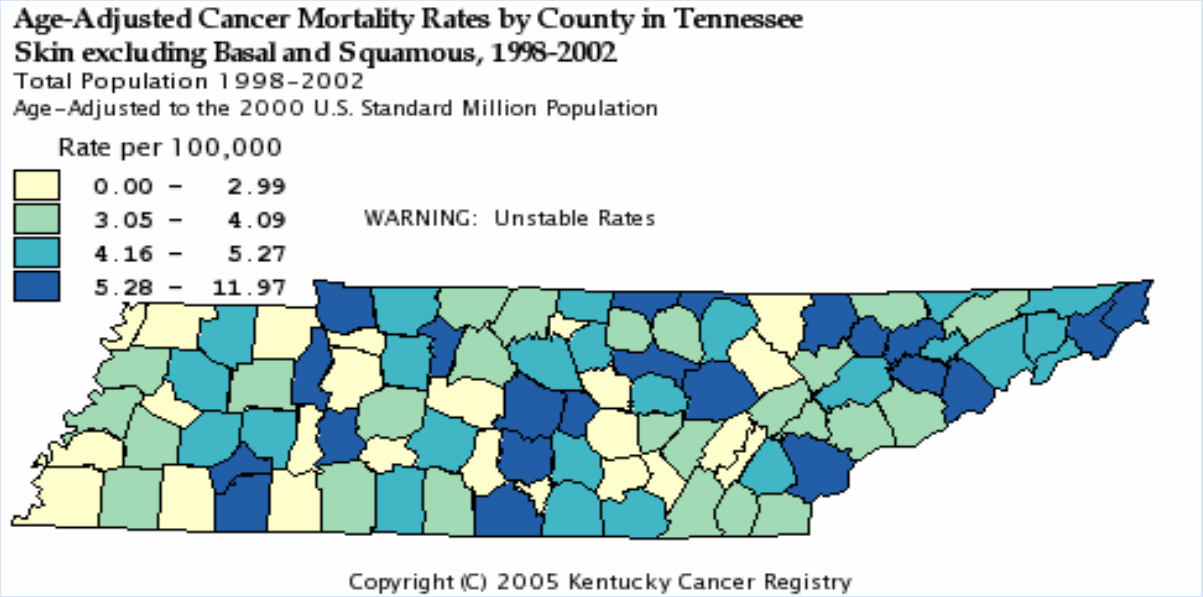
COLON AND RECTAL CANCER MORTALITY



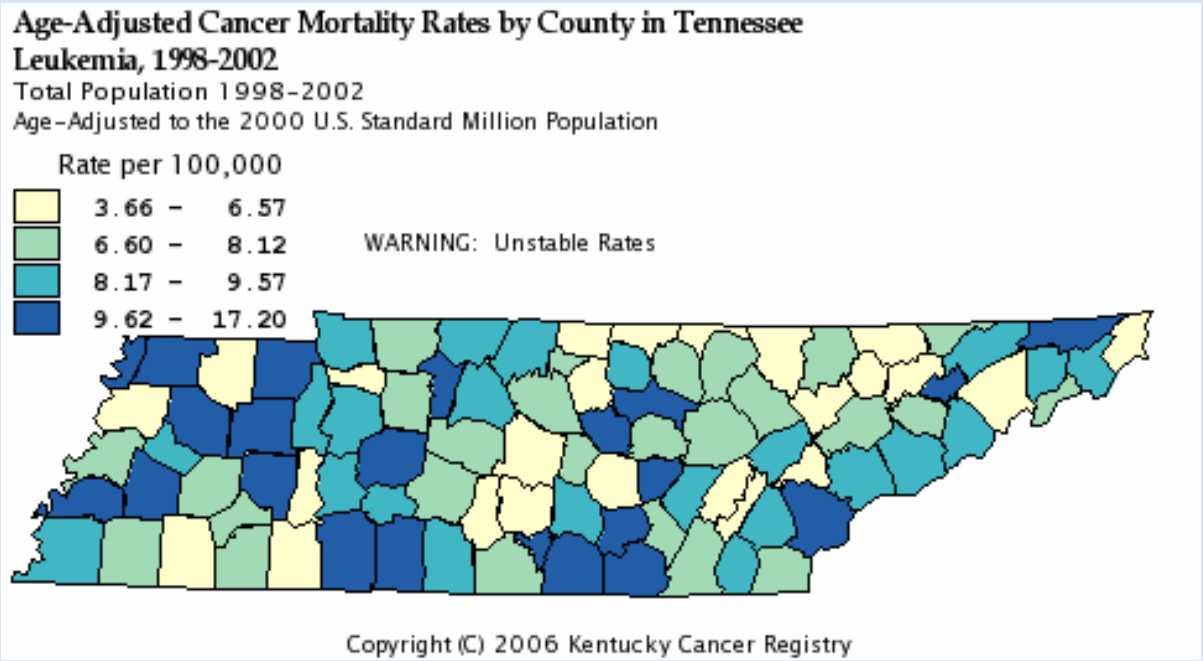
CERVICAL CANCER MORTALITY



SKIN CANCER MORTALITY



LEUKEMIA CANCER MORTALITY



Is there something different about cancer in Appalachia TN?

- Association with the most common cancer risk factors:
  - Mountain counties with older population
  - Higher use of tobacco
  - Communities suspect environmental factors

- ETSU decided to partner with VA health department and UK Cancer Center to explore question using community based participatory research

Addressing Health Disparities: Communities & Community Leaders as Partners

We Know:

- Community leaders (e.g., religious leaders) play a vital role in populations facing health disparities

- "Community-based education interventions and the establishment of local screening centers have been found to be effective approaches in Appalachia and rural settings" to address cancer and cancer prevention.

  (Hall et al., 2002 in *Cancer Epidemiology, Biomarkers & Prevention)*

Principles of Community Based Participatory Research (CBPR)

- A collaborative process of research involving scientists and community representatives
- CBPR:
  - Engages the community
  - Employs local knowledge in understanding health problems and the design of interventions
  - Invests community members in the processes and products of research
  - Community members are invested in the dissemination and use of research findings and ultimately in the reduction of health disparities

(Community-Based Participatory Research. Conference Summary. July 2002. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/about/cpcr/cbpr/)

Background and Process of Community Work Groups

- Purpose of the project:

- RACDP supported research projects from 2002-2005 funded by a Congressional appropriation through the CDC to ETSU

- To explore the community review work group as a method to disseminate findings about cancer disparities to grass-roots community representatives in Appalachia

- To review research findings about cancer from the RACDP and identify perspectives about what makes the experience with cancer different in Appalachia

Study Objectives

- To promote dialogue between the Work Group members and health providers
- To identify methods and opportunities for promoting collaboration
- To integrate the Work Group with regional efforts of the state Cancer Control Plans (TN and VA).

Northeast Tennessee Workgroup Participants

- People interested in cancer (non-health professionals)
- Active members of Appalachian communities
- 12 diverse members from Northeast TN

Methods

- Two Review Work Groups
  - Northeast Tennessee (12 participants)
  - Southwest Virginia (11 participants)
- Focus group methodology
- Five sequential meetings

Early Findings:

- The meaning of cancer in the community: *“Cancer is inevitable.”*
- Evidence of cancer fatalism, but this is a complex construct
- Access to equivalent health care services: *“If folks can’t get the same care as those who have insurance, they just go home and die.”*
- Importance of tailored messages about research and cancer:
  “When you start treating your patients as routine, they become just that.”
- Beliefs about cancer etiology: environment, genetics, diet, meth lab by-products

Early Findings, continued:

- Cancer communication: differences between men and women
- Age and community understanding of cancer
- Importance of community partnerships

What Work Group Members Decided to Do to Spread the Word

- Community presentations
- Health Fair
- Church Community Block Party
- ACS Relay for Life Booth
- Newspaper editorial
- Partnering with regional health ministry

ETSU commitment to population-based cancer research

- Joel Hillhouse, Department of Psychology, skin cancer and use of tanning beds by young women
- Jim Anderson, College of Public Health, attitudes toward colorectal screening in rural primary care practices
- Kelly Dorgan, Department of Communication, communication issues between patient and health professionals about breast cancer screening

Comments about Learning and Discussion Sessions

1 – Overview of regional cancer disparities

2 – Cancer communication issues

3 – Issues about cancer research

4 – State cancer control plans

Contributing factors : what makes Appalachia different?

- Geography
  - Much of Appalachian population lives in small and isolated communities
  - The mountains shape family lives
  - Strong personal and culture identity with “place”

Contributing factors : what makes Appalachia different?

- Health system characteristics
  - Availability of and access to care difficult
  - Mistrust of “being taken advantage of” by health care system
  - Lower incomes and
    - Health care is very expensive
    - Health insurance is expensive and has high deductibles
  - Too few providers demonstrate cultural competence

Contributing factors : what makes Appalachia different?

- Cultural characteristics
  - Confidence and trust is hard to build
  - General lack of assertiveness about health and health care
  - People are private and proud and don’t want charity
  - There is a strong faith in God with variable levels of fatalism
  - Minority communities are small and there are too few minority health professionals with whom to create trust

Why Talking to Communities about Cancer is Important

There are many lessons about cancer that can be learned by talking with community members and survivors like those involved with ETSU Community Cancer Research Work Groups